

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Kalispell, City of, PO Box 1997, Kalispell, MT 59903-1997
2. Type of action: Permit to Appropriate Water 76LJ 30027293
3. Water source name: Groundwater
4. Location affected by project: SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 33, Township 28 North, Range 21 West, Flathead County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met. The City of Kalispell recently drilled and constructed two new Public Water Supply Wells (PWS) wells to serve an expanded service area as a result of the annexation of the Old School Station (OSS) area. The wells are designated as OSS-1 and OSS-2. PWS well OSS-1 is a 12-inch diameter well completed to a depth of 343-feet below ground surface (bgs). PWS well OSS-2 is an 8-inch diameter well completed at a depth of 421-feet bgs. Both points of diversion (POD's) are located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 33, Township 28 North, Range 21 West, Flathead County, Montana. The applicant is seeking a water use permit for 1000 gpm up to 675.04 acre-feet for municipal purposes to help accommodate the expanded service area and predicted future growth benefiting the City of Kalispell by its ability to meet future municipal water supply demands. The scope of this EA is limited to the appropriation of water. It does not discuss impacts of the expanded service area that this agency only records as the place of use.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Department of Environmental Quality

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Not applicable, the source is groundwater.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: Not applicable, the source is groundwater.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: The proposed well will derive groundwater from the deep artesian aquifer within the Flathead Valley. Hydrogeologic information indicates that the deep artesian aquifer is present valley-wide encompassing an area of approximately 300 square miles. The primary recharge to the aquifer is from snowmelt infiltration in the surrounding mountain ranges. The requested appropriation will have minimal impact to the quality and supply of this groundwater source.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The Old School Station well-field consists of well OSS-1, which is the main production well and well OSS-2 that was originally drilled as a test well and has subsequently been converted to a second supply well. Both wells were drilled by a licensed well driller and comply with Administrative Rules of Montana, Title 37, Chapter 43, MCA and Title 36, Chapter 21, ARM.

WELL COMPLETION DETAILS		
	OSS WELL 1	OSS WELL 2
Total Depth	350 feet	421 feet
Static Water Level (botc)	25.87 feet	14.42 feet
Grout Seal Depth	96 feet	100 feet
Well Casing Diameter	12-inch steel	8-inch steel
Depth Installed	+2 – 302 feet	+2 – 421 feet
Screen Diameter	12-inch PVC	NA
Screen Length or perforations	292 – 343 feet	343 – 357 feet 380 – 392 feet
Tested Pumping Rate	900 gpm	600 gpm
Pumping Water Level @ 72 hours	251 feet	189.5 feet
Drawdown after 72 hours pumping	225 feet	175 feet
Specific Capacity	4.00 gpm/ft	3.43 gpm/ft

The wells will not impact any of the above described elements and are properly constructed.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: The wells are located on the south end of Kalispell in a highly developed area. Due to the location of the wells there will be no impact to wildlife or plant species.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No impact

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: No impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: The wells are located on land that was historically irrigated. No impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: The drilling of OSS-1 and OSS-2 does not promote weed growth.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: The historic Demersville School was demolished and the wells have already been drilled. No historic sites or archeological sites will be impacted from this groundwater appropriation.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: None

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: Locally adopted plans and goals are the fundamental motivation for requesting the water use permit.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: The past drilling and future use of wells OSS-1 and OSS-2 will have no impact to the quality of recreational or wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: No impact

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity?
- (b) Local and state tax base and tax revenues? Yes
- (c) Existing land uses? Yes
- (d) Quantity and distribution of employment? Yes
- (e) Distribution and density of population and housing? Yes
- (f) Demands for government services? Yes

(g) Industrial and commercial activity? Yes

(h) Utilities? Yes

(i) Transportation? Yes

(j) Safety? No

(k) Other appropriate social and economic circumstances? Unknown

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: Population growth

Cumulative Impacts: A greater financial and commercial district

3. Describe any mitigation/stipulation measures: None

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: An alternative would be the same action in a different location. No action would limit future growth.

PART III. Conclusion

1. Preferred Alternative: As proposed, which is not an alternative.

2. Comments and Responses: None

3. Finding:

Yes___ No___ Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant impacts have been identified, therefore no EIS is necessary.

Name of person(s) responsible for preparation of EA:

Name: Rich Russell

Title: Water Resources Specialist

Date: August 14, 2007